

CLAIMS

1. Hydrodynamic torque converter having located in the housing (1) at least one clutch (2) the actuation device of which has at least one piston (3) and in which the hydraulic pressure within said housing (1) acts upon a first piston area (4) and a hydraulic pressure changeable by one control unit (11) acts upon a second piston area (5) characterized in that the hydraulic pressure acting upon said first piston area (4) acts directly or indirectly upon said control unit (11) and said control unit (11) adjusts the hydraulic pressure upon said second piston area (5) depending on the hydraulic pressure upon said first piston area (4).

2. Hydrodynamic torque converter according to claim 1, characterized in that one drive mechanism of said torque converter (1) is connectable via said clutch (2) with one pump impeller (6) of said torque converter.

3. Hydrodynamic torque converter according to claim 1, characterized in that said control unit (11) has one valve unit the pressure medium supply of which is connected with the pressure medium acting upon said first piston area (4) and which depending on a nominal value setting (12) connects pressure medium acting upon said first piston area (4) with the pressure medium acting upon said second piston area (5).

4. Hydrodynamic torque converter according to claim 1, characterized in that said control unit (11) has one valve unit the pressure medium supply (16) of which is connected with a pressure medium source, specially of a transmission pump which is connected with the pressure medium acting upon said first piston area (4) and which depending on a nominal value setting (12) and depending on the hydraulic pressure medium source with the pressure medium acting upon said second piston area.

5. Hydrodynamic torque converter according to claim 1, characterized in that a pressure sensor (17) determines the hydraulic pressure acting upon said first piston area (4) and an electronic control unit (18) adjusts the hydraulic pressure acting upon said second piston area (5) depending on a nominal value setting.

6. Hydrodynamic torque converter according to claim 5, characterized in that one rotational speed sensor (20) determines a rotational speed of said pump impeller (6) and said electronic control unit (18), depending on the rotational speed of said pump impeller (6), adjusts the pressure acting upon said first piston area (4) and a nominal speed setting the pressure acting upon said second piston area.

7. Hydrodynamic torque converter according to claim 3, characterized in that the space (10) formed by said converter housing (1) and said first piston area (4) is connected via one line (9) with said valve unit (11).

8. Hydrodynamic torque converter according to claim 7, characterized in that said line (9) is located in a non-rotatable shaft connected with the stator.

9. Hydrodynamic torque converter according to claim 1, characterized in that the supply line (13) of the pressure medium acting upon said second piston area (5) is located in a non-rotatable shaft connected with the stator.